

Claims

1. A method for synchronizing data stored in two different databases (DB1,DB2) of the same nature, at least one of the two databases (DB1) being stored in a removable device, in particular a smartcard (CAR), said removable device communicating with a system (MOB,PDA), **characterized in that**, for databases synchronization purpose, a program external to said removable device (CAR) sends a command to the removable device (CAR) for setting a synchronization object to said first database (DB1), a synchronization object being affected to said first database, said synchronization object being also affected to the second database (DB2) once the synchronization step between the two databases has been successfully performed, said object defining the last database synchronization which has been performed between said two databases (DB1,DB2).
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- 10 2. The method according to claim 1, **characterized in that** it comprises, when a later synchronization process has to be performed between the first and the second databases (DB1,DB2), the step of reading the synchronization object affected to the first database (DB1) and compares it with the synchronization object affected to the second database (DB2), and if the objects matches, each of the records that was modified from one of the databases is modified in the other database.
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- 20 3. The method according to claim 2, **characterized in that** it comprises, when a system initiates a synchronization step, the step of informing to the removable device (CAR) that a new synchronization of the data of the first database (DB1) with said second database (DB2), then the removable device (CARD) answers with the current synchronization object, if exists, defines the last time that this database has been synchronized with this second database (DB2), and also proposes a new synchronization object, for future use, defining the state 25 of the database after the current synchronization is finished.

4. The method according to claims 1, **characterized in that** the external program asks for the modifications of the first database (DB1), which have occurred since the last synchronization object, and the removable device answers with the identifiers of the database items modified, added or deleted.

5. The method according to claim 4, **characterized in that** the device (MOB) is able to make use of a local copy of the removable device (CAR) memory to obtain the database content and to follow with the data synchronization process.

6. The method according to claims 1 or 3, **characterized in that** the device (MOB) informs to the removable device (MOB) that the synchronization has been successfully performed, the removable device replacing the last synchronization object by the new one, this new synchronization object being able to detect further modifications since the current synchronization.

7. The method according to claim 1, **characterized in that** the synchronization object is a random number generated in the removable device (CAR).

8. A removable device, in particular a smart card (CAR), being able to communicate with a system (MOB, PDA), said removable device including a first database (DB1) able to be synchronized with a second database (DB2) of the same nature, **characterized in that** it comprises means for, when a synchronization step is initiated between said two databases (DB1,DB2), receiving a command initiated by an external system requesting to set a synchronization object to said first database (DB1), a synchronization object being affected to said first database (DB1), said synchronization object being also affected to the second database (DB2) once the synchronization step between the two databases has been successfully performed, said object defining the last database synchronization which has been performed between said two databases

9. A system (MOB) able to communicate with a removable device (CAR), in particular a smart card (CAR), said removable device including a first database

(DB1) to be synchronized with a second database (DB2) of the same nature, characterized in that it comprises a program for setting, each time a synchronization step is initiated between said two databases (DB1,DB2), a synchronization object to said database (DB1) for affecting a synchronization object to said first database (DB1), this synchronization object being also affected to said second database (DB2) once the synchronization step between the two databases has been successfully performed, said object defining the last database synchronization which has been performed between said two databases of said two systems,

10 10. A computer program product for a system able to communicate with a removable device, said removable device storing a first database (DB1) to be synchronized with a second database (DB2), the computer program product including an instruction set which when the instruction set is loaded in the system, makes the system perform, when a synchronization is initiated between said first database (DB1) and said second database (DB2), a setting step in which a command [SLB7] is sent to said removable device (CAR) for setting a synchronization object to said first database (DB1), a synchronization object being affected to said first database (DB1), said synchronization object being also affected to the second database (DB2) once the synchronization step between the two databases has been successfully performed, said object defining the last database synchronization which has been performed between said two databases and being used for future synchronization step between these two databases (DB1,DB2).

15 11. A computer program product for a removable device (CAR) able to communicate with a system (MOB), said removable device storing a first database (DB1) to be synchronized with a second database (DB2), the computer program product including an instruction set which when the instruction set is loaded in the system, makes the removable device (CAR), when a synchronization is initiated between said first database (DB1) and said second database (DB2),

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- A receiving step in which the removable device receives a command coming from an external system, said command having the function of setting a synchronization object,
- An execution step in which said program executes the command in

5 setting the generation of a synchronization object to be affected to said first database (DB1), said synchronization object being also affected to the second database (DB2) once the synchronization step between the two databases has been successfully performed, said object defining the last database synchronization which has been performed between said two databases.

10 12. The program according to claim 11, characterized in that the synchronization object includes a random number.